

FIG. 2B

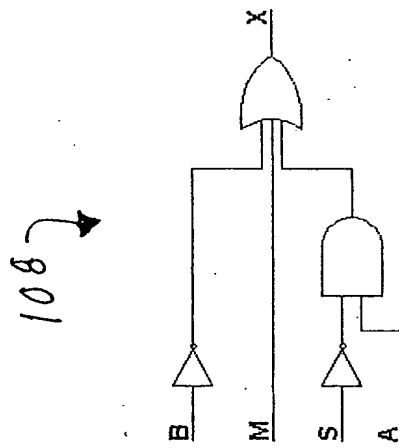


FIG. 2A

MS	AB	MS				Y
		00	01	11	10	
AB	00	1	1	1	1	1
	01	1	1	1	1	1
	11	1	1	1	0	0
	10	0	1	1	0	0

$$Y = A' + S + BM'$$

MS	AB	MS				X
		00	01	11	10	
AB	00	1	1	1	1	1
	01	0	0	1	1	1
	11	1	0	1	1	1
	10	1	1	1	1	1

$$X = B' + AS' + M$$

FIG. 3

Present State		Inputs		Next State	
A	B	M	S	X	Y
0	0	0	0	1	1
0	0	0	1	1	1
0	0	1	1	1	1
0	0	1	0	1	1
0	1	0	0	0	1
0	1	0	1	0	1
0	1	1	1	1	1
0	1	1	0	1	1
1	1	0	0	1	1
1	1	0	1	0	1
1	1	1	1	1	1
1	1	1	0	1	0
1	0	0	0	1	0
1	0	0	1	1	1
1	0	1	1	1	1
1	0	1	0	1	0

FIG. 4

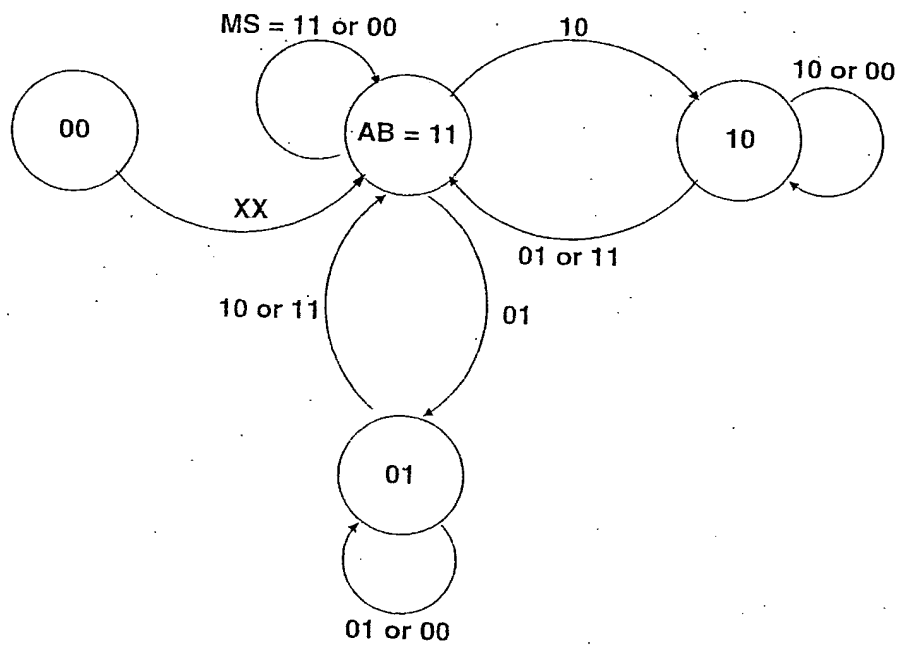


FIG. 5

Time	Event	Result	Transition Tested
0s	Start	Clock running. Inputs Undefined.	
52ns	Master drives HIGH	Slave follows HIGH on next clock pulse. State Transitions to AB = '11'	h
102ns	Master drives LOW	Slave follows LOW on next clock pulse. State Transitions to AB = '01'	e
162ns	Master drives HIGH	Slave follows HIGH on next clock pulse. State Transitions to AB = '11'	f
176ns	Master releases	State remains at AB = '11'	
202ns	Slave drives LOW	Master follows LOW on next clock pulse. State Transitions to AB = '10'	b
252ns	Slave drives HIGH	Master follows HIGH on next clock pulse. State Transitions to AB = '11'	d
302ns	Master AND Slave drive LOW	State remains at AB = '11'	a
352ns	Master AND Slave drive HIGH	State remains at AB = '11'	a
375ns	Slave releases	State remains at AB = '11'	
402ns	Master drives LOW	Slave follows LOW on next clock pulse. State Transitions to AB = '01'	e
462ns	Slave drives HIGH	State remains at AB = '01'	g
476ns	Slave releases	State follows LOW on next clock pulse. State remains AB = '01'	f
552ns	Master AND Slave drive HIGH	State Transitions to AB = '11'	
626ns	Master releases	State remains at AB = '11'	
652ns	Slave drives LOW	Master follows LOW on next clock pulse. State Transitions to AB = '10'	b
702ns	Master drives HIGH	State remains at AB = '10'	c
726ns	Master releases	Master follows LOW on next clock pulse. State Remains AB = '10'	c
802ns	Master AND Slave drive HIGH	State Transitions to AB = '11'	d

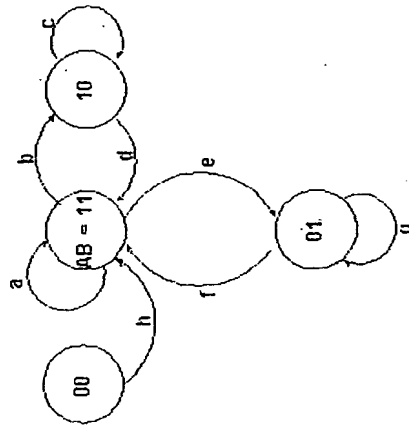


FIG. 6

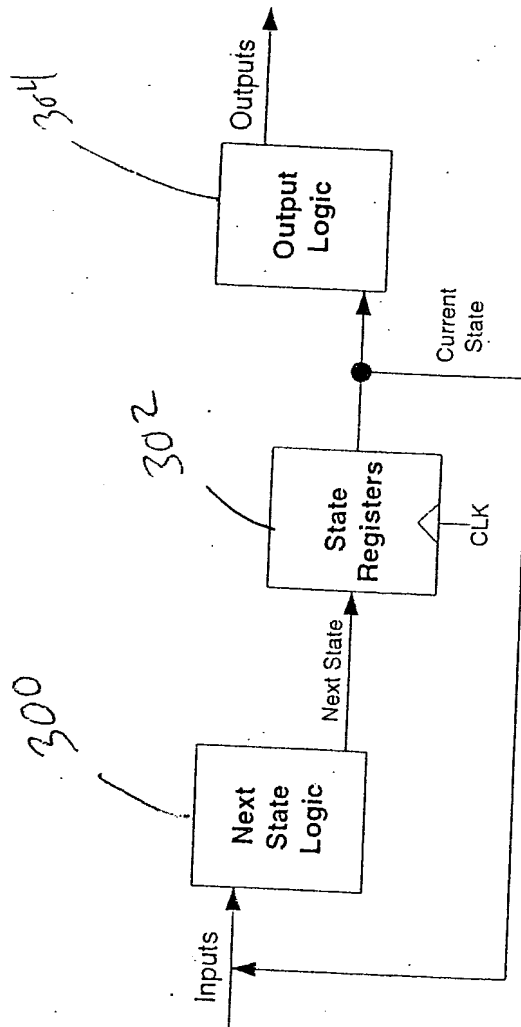


FIG. 7